

Development of eco-tourism strategy using swot analysis: case study of Bayung Gede village

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Abstract. Bayung Gede Village is one chosen village to be developed as tourism village. However, due to observation result conducted by researcher, Bayung Gede village still has no tourism village development strategy design. This research aims to formulate appropriate strategy to be implemented in Bayung Gede village. Strategy formulation based on SWOT-4K matrices and performed by using TOWS matrices. From the research result, found that Bayung Gede village is in prime condition to expand its market and to develop product also has a lot of opportunities which can be utilized to develop tourism village. By development of Bayung Gede village to be tourism village, it would be able to increase village revenue and welfare.

1. Introduction

The swiftness of Bali tourism development makes the government should keep developing tourist sites in Bali Island. In order to make Bali tourism remains competitive, it is required to create new tourism site to attract tourist's interest to visit (1). Ecotourism is one strategy that can be utilized to develop a tourist site by keep protecting environment and generating revenues for local society. One form of tourism site development based on ecotourism is tourism village. By the presence of tourism village, it would make the village be able to generate revenue, so that it should lessen urbanization flow and poverty. State of Bangli is a state located in Bali Province and the only state that has no shore line, but this state has a lot of tourist destinations which be able to attract tourist's interest to visit either local or international (2). One village located in Bangli State is Bayung Gede village. The village is chosen to be research object, because Bangli Village is the first village in Bali which become world's attraction to perform a research about "Balinese's characters" by Gregory Bateson and Margaret Mead. Besides, Bayung Gede village has culture uniqueness, building architecture, agritourism potential, and barns which can be utilized to support tourism village development. Based on observation result and short interview at 23rd September 2016 with Chief of Bayung Gede village, it can be drawn a conclusion that Bayung Gede village has no clear plans nor strategies to develop tourism village. Area with such potentials for development to be tourism village should have clear strategy formulation for tourism development. By having clear strategy formulation, the area will not only be protected from threats, but also increase economic conditions in the area (3). Strategies and policies are also very important to build continuity ecotourism (4). This research aims to determine appropriate strategies to develop Bayung Gede village become tourism village by focusing on internal factor analysis and external factor.

2. Literature Review

2.1 Tourism village

Tourism village is a tourism area which give real atmosphere of a village from either social life, culture, unique spatial, or economic activities which have potential to be developed as tourism components (5). Fandeli define tourism village as village area that offers original village atmosphere, from either social, culture, society's activity, architecture, or value that capable of development to attract tourist's interest such as foods, souvenir, and inn (6).

2.2 Strategy

Strategy is a series of commitment or integrated actions, formulated to exploit core competence and achieve competitive advantage (7). Alfred define strategy as target formulation and long-term objective of an organization, actions direction, and also required resources to achieve the target (8).

2.3 Strategy Formulation

In formulating strategies, there are 3 steps such as, reviewing vision and mission, identifying opportunities and threats, identifying organization internal strength and weakness, and determining implemented alternative strategies (9).

3. Methods

3.1 Type of Data

Data used in this research is a primary data in forms of interview conducted with Government of Bangli State, Bayung Gede village chief, and experts in tourism. Besides, there are secondary data such as politic, economic, social, technology, environment and tourism industry competitive conditions in Bali which acquired from articles and Statistics center in Bali Province.

3.2 Data Collection

Primary data in this research is collected by using interview methods which directed to Bupati Bangli, Head of DPRD, Head of Dinas Pariwisata, Bayung Gede village chief, and expert in tourism sector. Interview conducted by having structured interview, therefore each respondent answers the same questions. Meanwhile, the secondary data are acquired from internet articles related with politics, economic, social, technology, environment in Indonesia and also tourism industry competition condition in Bali. Next, those data are going to be analyzed to formulate strength and weakness elements (internal factors), opportunity and threats (external factors) which are going to be utilized in strategy formulation process by using TOWS matrices.

4. Analysis and Review

4.1 External Factor Identification

In identifying Bayung Gede village external environment, researcher uses PESTEL (Politics, Economic, Social, Technology, Environment, and Legal) analysis and Porter 5 Forces analysis. Those analysis performed to get perspective how external factors (opportunity and threat) can affect strategy formulation. Opportunity factors identified are such as :

Table 1. External Factor Identification.

Code	Identified factors
	Opportunity
O1	Bangli State government support tourism village development, from both funding and policy
O2	Increasing number of international tourist from Europe and Australia in last few years with purpose for tourism to Bali

O3	Bali tourism is gaining more interest from domestic tourist
O4	In 2020, it is projected that 55,19% of Indonesia population will stay in city. Therefore, the opportunity for urban people to visit the village will be higher.
O5	The presence of Online Travel Agency (Agoda, Expedia, Zicasso, and Tripadvisor) which can be utilized as online promotion media.
O6	NGO which runs in tourism sector support tourism village development from marketing side.
O7	There are 12 cycling tour providers in Kintamani area which can be invited to collaborate to increase village's revenue.
O8	There are 396 travel agents which can be invited to collaborate.
Threats	
T1	Terrorism action that can trigger travel warning from other countries
T2	Tourism industry competition in Bali is very high
T3	Increasing amount of environment pollution in Indonesia.

By the result of table 1, there are 8 opportunities and 3 threats identified.

4.2 External Factor Evaluation

External factors evaluation is performed to understand how external factors in tourism industry can affect tourism village strategy development. Weighted score from each factor will show EFE quadrant position in SWOT matrices. Weighting is performed by doing pairwise comparison using expert choice software. Each factor will be given rating or score which timed by weight to have the weighted score.

Table 2. External Factor Evaluation.

External Factor	Score		Weight	Score X Weight
	Opportunity (+ 1 s/d + 4)	Threat (- 1 s/d - 4)		
Opportunity				
O1	+4.0		0,17	0,68
O2	+3.0		0,10	0,29
O3	+2.5		0,04	0,10
O4	+2.5		0,04	0,10
O5	+4.0		0,08	0,34
O6	+3.5		0,06	0,21
O7	+3.5		0,11	0,37
O8	+2.5		0,07	0,17
Threat				
T1		-4.0	0,20	-0,82
T2		-2.5	0,08	-0,19
T3		-2.0	0,05	-0,10
Total			1	1,15

From EFE matrix result, it can be concluded that the most affecting opportunity factors in tourism village strategy development is O1 which is Bangli state government support tourism village development, from both funding and policy. Meanwhile, threat factor that could affect is T1 which is terrorism action that trigger travel warning from other countries. From EFE matrices calculation result, it is acquired a score of 1,15 which means, there are a lot of opportunities that can be utilized to develop Bayung Gede village to be a tourism village.

4.3 Internal Factor Identification

Internal environment identification of Bayung Gede village is performed by using business model canvas approach. Data for existing BMC of Bayung Gede village is acquired by having interview with Bayung Gede village chief.

Table 3. Internal Factor Identification.

Code	Identified factors	
	Strength	
S1	Bayung Gede village owns 48 hectares farming fields which can be utilized for agritourism development	
S2	Known as Mandarin Orange producer in Kintamani area	
S3	There are a lot of vegetable variations planted by Bayung Gede village people	
S4	There are many barns owned by village folks which can be utilized for barns tourism.	
S5	Bayung Gede village has a culture identic with ancients Bali and cannot be found in another village	
S6	Bayung Gede village has a strategic location because it is close with Kintamani tourist site.	
S7	Bayung Gede village has a peaceful environment, free from pollution, and away from city crowd	
S8	There are empty lands in village area which can be developed as supporting facilities for tourist.	
Weakness		
W1	There's so less people in village have realized the importance of tourism and have the capabilities in tourism	
W2	Collaboration in tourism hasn't performed maximally.	
W3	There's no media utilized for marketing	
W4	There's no tourism village development activity integrated with financial and human resource aspects.	
W5	Revenue is only from market stall rent which is so minimal if utilized for operational and Bayung Gede village development.	

Based on identification result on table 3, there are 8 strengths and 5 weaknesses identified.

4.4 Internal Factor Evaluation

Internal factor evaluation performed to assess how internal factors acquired can affect strategy development. Weighting in the calculation performed by using pairwise comparison.

Table 4. Internal Factor Evaluation.

Internal Factor	Score		Weight	Score X Weight
	Strength	Weakness		
	(+ 1 s/d + 4)	(- 1 s/d - 4)		
Strength				
S1	+3.5		0,09	0,31
S2	+2.5		0,05	0,12
S3	+2.0		0,03	0,06
S4	+3.0		0,09	0,26
S5	+4.0		0,22	0,88
S6	+2.5		0,11	0,28
S7	+2.0		0,04	0,08
S8	+2.0		0,05	0,09
Weakness				
W1		-3.0	0,12	-0,36
W2		-4.0	0,07	-0,27
W3		-2.5	0,05	-0,12
W4		-3.5	0,07	-0,25
W5		-2.5	0,03	-0,07

Total **1** **1,00**

From internal factor evaluation result using IFE matrix, it can be understood that strength factor that most affecting tourism village development is S5 which is having identic culture with ancient Bali and can't be found in another village. Meanwhile, weakness factor that most affecting is W1 which is the less number of people in village that have realized the importance of tourism and have the capabilities in tourism. Score resulted from IFE calculation is 1,00 which means Bayung Gede Village has the strength that can be utilized to develop tourism village.

4.5.SWOT-4k

From calculation result of EFE matrix with score of 1,15 and IFE with score of 1,00. Bayung Gede village is at the first quadrant (aggressive). Such thing gives few points for conclusion which are :

- a. Bayung Gede village is in prime internal condition to perform market expansion and product development
- b. There are many opportunities which can be utilized to develop tourism village
- c. Strategy development is more like aggressive.

4.6 TOWS Matrices

After calculating IFE and EFE matrices, the next step is qualitative strategy formulation based on each internal and external factors intersection which explained in TOWS matrices:

a. SO Strategy

S-O Strategy is a strategy formulated by utilizing internal factors to capture development opportunity in external environment. This strategy is expansive and aggressive. The result of SO strategies are:

Table 5. SO Strategy.

		External Factor								
		Opportunity								
		O1	O2	O3	O4	O5	O6	O7	O8	
Internal Factor	Strength	S1	SO1 Developing farming fields and orange fields to be orange harvest agritourism							
		S2	(S 1,2 : O 1)							
		S3	SO2 Having collaboration with cycling tour provider in Kintamani area							
		S4	(S 6 : O 7)							
		S5	SO3 Utilizing people's barn to be developed as barn tourism							
		S6	(S 4 : O 1)							
		S7	SO4 Building rest area and souvenir stalls as supporting facilities for tourists.							
		S8	(S 8 : O 1)							

b. ST Strategy

ST strategy is a strategy developed as preventive steps. Strategy development performed by utilizing strengths to anticipate external factor threats. Here's the result of ST Strategy formulation.

Table 6. ST Strategy.

		External Factor			
		Threat			
		T1	T2	T3	
Internal Factor	Strength	S1	ST1 Making a planting tree programs to reduce pollution		
		S2	(S 7 : T 3)		

- S3
- S4
- S5 **ST2** Offer 3 different types of tourism as differentiation to
- S6 win competition
- S7 (S 1,2,4,5 : T 2)
- S8

c. WO Strategy

WO Strategy is a development technique or refinement by utilizing opportunities from external environment to refine weaknesses in company's internal. Therefore, WO strategy is a strategy development with purpose to refine weak business internal for opportunity capture optimization.

Table 7. WO Strategy.

Internal Factor	Weakness	External Factor							
		Opportunity							
		O1	O2	O3	O4	O5	O6	O7	O8
	W1	WO1 Using online travel agency as a promotion media for Bayung Gede tourism village (S 7 : T 3)							
	W2	WO2 Having collaboration with NGO that runs in tourism sector to help Bayung Gede village tourism marketing (W 2 : O 6)							

Table 7. WO Strategy (con't).

Internal Factor	Weakness	External Factor							
		Opportunity							
		O1	O2	O3	O4	O5	O6	O7	O8
	W3	WO3 Having collaboration with travel agent to increase visiting number of tourists from Europe and Australia. (W 2 : O 2,8)							
		WO4 Increasing Bayung Gede village's people capabilities to serve international tourists. (W 1,4 : O 1,2)							
		WO5 Charging entrance ticket for tourist that comes for both sight-seeing and cycling to increase village revenue. (W 2,5 : O 7)							
	W4	WO6 Forming a tourism conscious group (pokdarwis) as a special team that handle tourism village development (W 1 : O 1)							
		WO7 Having collaboration with travel agent to capture domestic tourist opportunities (W2 : O 3,4,8)							
	W5	WO8 Having tourism seminary to increase Bayung Gede village people awareness to the importance of tourism village. (W 1,4 : O 1)							

d. WT Strategy

WT strategy is a strategy formulation for survival. This strategy development is done because of weak internal condition and threats from external factors.

Table 8. WT Strategy.

		External Factor		
		Threat		
		T1	T2	T3
Internal Factor	Weakness	W1	WT1 Making a website as marketing media to increase	
		W2	competitiveness	
		W3	WT2 Adding new revenue stream from tourism product to	
		W4	increase village's sustainability	
		W5	(W5 : T 2)	

SWOT-4K shows that Bayung Gede village is in first quadrant (aggressive) with SO Strategy as recommendation. To optimize SO strategy implementation, it is required to formulate alternative strategies to maximize existing strength and opportunities to minimize weakness and threats of Bayung Gede village. Thus, it is required to formulate ST, WO, and WT strategies.

5. Conclusion

From the result of SWOT-4K matrices, it can be concluded that Bayung Gede village has a good internal condition to perform market expansion and product development. Strategy formulation performed by TOWS matrices results 16 strategies which divided into 4 SO strategies, 2 ST Strategies, 8 WO Strategies, and 2 WT Strategies. Strategies are designed more leads to human resource development and utilization potential of the premises to be used as tourist attraction. Farms and farm owned by the villagers could be developed into a tourist cattle combined with agro tourism, so there are additional attractions that can be enjoyed by tourists. Building architecture and village community activities can also be utilized by the developers to invite tourists to feel the atmosphere of the village which is still thick with Balinese culture. Therefore need for continuous cooperation between the Government and the community in order that the development of tourism can go well.

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